Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented): A tilt control method in an optical pickup including a tilt adjustment coil for adjusting the tilt of an objective lens, comprising the steps of:

recording an offset adjustment signal in a test recording area provided on an optical disc,

wherein said offset adjustment signal is recorded while modifying a driving signal level supplied to said tilt adjustment coil;

thereafter playing back an RF signal of said offset adjustment signal that was recorded on the optical disc;

detecting the peak level in the RF signal of said offset adjustment signal that was played back; and

setting said driving signal level, when the detected peak level reaches a maximum, as an offset value for the driving signal to be supplied to the tilt adjustment coil;

wherein the tilt angle of the optical pickup is changed by changing the level of the drive current supplied to the tilt adjustment coil.

2. (Original): A tilt control method according to claim 1, wherein:

the tilt control is performed by adding the set offset value to a tilt signal for performing tilt control and supplying the added signal to said tilt adjustment coil.

3. (Previously Presented): A tilt control method in an optical pickup including a tilt adjustment coil for adjusting the tilt of an objective lens, comprising the steps of:

recording an offset adjustment signal in a test recording area provided on an optical disc,

wherein said offset adjustment signal is recorded while modifying a driving signal level supplied to said tilt adjustment coil;

thereafter playing back an RF signal of said offset adjustment signal that was recorded on the optical disc;

detecting the bottom level in the RF signal of said offset adjustment signal that was played back; and

setting said driving signal level, when the detected bottom level reaches a minimum, as an offset value for the driving signal to be supplied to the tilt adjustment coil;

wherein the tilt angle of the optical pickup is changed by changing the level of the drive current supplied to the tilt adjustment coil.

4. (Original): A tilt control method according to claim 3, wherein:

the tilt control is performed by adding the set offset value to a tilt signal for performing tilt control and supplying the added signal to said tilt adjustment coil.

5. (Previously Presented): A tilt control method in an optical pickup including a tilt adjustment coil for adjusting the tilt of an objective lens, comprising the steps of:

recording an offset adjustment signal in a test recording area provided on an optical disc,

wherein said offset adjustment signal is recorded while modifying a driving signal level supplied to said tilt adjustment coil;

thereafter playing back an RF signal of said offset adjustment signal that was recorded on the optical disc;

detecting the peak level and the bottom level in the RF signal of said offset adjustment signal that was played back; and

setting said driving signal level, when the difference between the detected peak level and bottom level reaches a maximum, as an offset value for the driving signal to be supplied to the tilt adjustment coil;

wherein the tilt angle of the optical pickup is changed by changing the level of the drive current supplied to the tilt adjustment coil.

6. (Original): A tilt control method according to claim 5, wherein:

the tilt control is performed by adding the set offset value to a tilt signal for performing tilt control and supplying the added signal to said tilt adjustment coil.

7. (Previously Presented): A tilt control apparatus for adjusting the tilt of an objective lens in an optical pickup comprising:

a signal recording circuit for recording a signal by irradiating light onto a disc via said objective lens;

a photo detector circuit for obtaining an RF signal by detecting reflected light from the disc via said objective lens;

a peak level detector circuit for detecting the peak level of the RF signal from said photo detector circuit;

a tilt adjustment coil for controlling the tilt of said objective lens; and

a tilt control circuit for controlling the driving signal level supplied to said tilt adjustment coil;

an offset adjustment signal is written to the disc by recording a signal to the disc by said signal recording circuit while said tilt control circuit modifies the driving signal level to the tilt control coil, and the relationship between driving signal level and recording position is stored;

said photo detector circuit detects an RF signal of the offset adjustment signal that was recorded on the disc;

the peak level detector circuit detects the peak level of the RF signal in said offset adjustment signal; and

the tilt control circuit detects the driving signal level of the tilt control coil corresponding to the maximum of the detected peak level and uses the detected driving signal level as an offset value for tilt control;

wherein the tilt angle of the optical pickup is changed by changing the level of the drive current supplied to the tilt adjustment coil.

8. (Original): A tilt control apparatus according to claim 7, wherein:

said tilt control circuit performs tilt control by adding said offset value to a tilt signal for performing tilt control and supplying this to said tilt adjustment coil.

9. (Previously Presented): A tilt control apparatus for adjusting the tilt of an objective lens in an optical pickup comprising:

a signal recording circuit for recording a signal by irradiating light onto a disc via said objective lens;

a photo detector circuit for obtaining an RF signal by detecting reflected light from the disc via said objective lens;

a bottom level detector circuit for detecting the bottom level of the RF signal from said photo detector circuit;

a tilt adjustment coil for controlling the tilt of said objective lens; and

a tilt control circuit for controlling the driving signal level supplied to said tilt adjustment coil;

an offset adjustment signal is written to the disc by recording a signal to the disc by said signal recording circuit while said tilt control circuit modifies the driving signal level to the tilt control coil, and the relationship between driving signal level and recording position is stored;

said photo detector circuit detects an RF signal of the offset adjustment signal that was recorded on the disc;

the bottom level detector circuit detects the bottom level of the RF signal in said offset adjustment signal; and

the tilt control circuit detects the driving signal level of the tilt control coil corresponding to the minimum of the detected bottom level and uses the detected driving signal level as an offset value for tilt control;

wherein the tilt angle of the optical pickup is changed by changing the level of the drive current supplied to the tilt adjustment coil.

10. (Original): A tilt control apparatus according to claim 9, wherein:

said tilt control circuit performs tilt control by adding said offset value to a tilt signal for performing tilt control and supplying this to said tilt adjustment coil.

11. (Previously Presented): A tilt control apparatus for adjusting the tilt of an objective lens in an optical pickup comprising:

a signal recording circuit for recording a signal by irradiating light onto a disc via said objective lens;

a photo detector circuit for obtaining an RF signal by detecting reflected light from the disc via said objective lens;

a peak level detector circuit for detecting the peak level of the RF signal from said photo detector circuit;

a bottom level detector circuit for detecting the bottom level of the RF signal from said photo detector circuit;

a tilt adjustment coil for controlling the tilt of said objective lens; and

a tilt control circuit for controlling the driving signal level supplied to said tilt adjustment coil;

an offset adjustment signal is written to the disc by recording a signal to the disc by said signal recording circuit while said tilt control circuit modifies the driving signal level to the tilt control coil, and the relationship between driving signal level and recording position is stored;

said photo detector circuit detects an RF signal of the offset adjustment signal that was recorded on the disc;

said peak level detector circuit detects the peak level of the RF signal in said offset adjustment signal;

said bottom level detector circuit detects the bottom level of the RF signal in said offset adjustment signal; and

the tilt control circuit detects the driving signal level of the tilt control coil corresponding to the maximum of the difference between the detected peak level and bottom level and uses the detected driving signal level as an offset value for tilt control;

wherein the tilt angle of the optical pickup is changed by changing the level of the drive current supplied to the tilt adjustment coil.

12. (Original): A tilt control apparatus according to claim 11, wherein:

said tilt control circuit performs tilt control by adding said offset value to a tilt signal for performing tilt control and supplying this to said tilt adjustment coil.